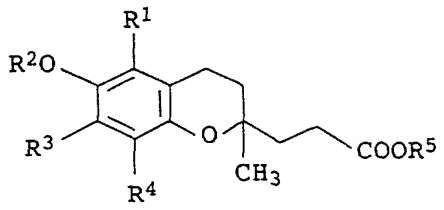
We claim:

1. The use of chroman derivatives of the formula I,



I

in which the substituents, independently of one another, have the following meanings:

R^1 is hydrogen, C_1-C_{12}-alkyl,

R^2 is hydrogen, C_1-C_{12}-acyl,

R^3 and R^4

are hydrogen, C_1-C_{12}-alkyl,

R^5 is hydrogen, C_1-C_{12}-alkyl, aryl

in cosmetic or dermatological preparations.

2. The use of chroman derivatives as claimed in claim 1, in which

R^1 is hydrogen, C_1-C_3-alkyl,

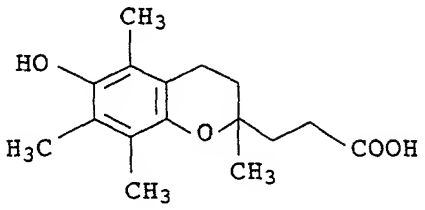
R^2 is hydrogen, C_1-C_3-acyl,

R^3 and R^4

are C_1-C_3-alkyl and

R^5 is hydrogen, C_1-C_3-alkyl.

3. The use of a chroman derivative as claimed in claim 1 having the formula Ia



Ia.

4. The use as claimed in any of claims 1 to 3 for prophylaxis against aging processes of the human skin.

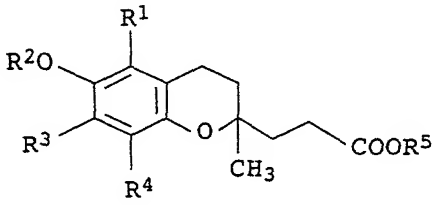
5. The use as claimed in claim 4 for prophylaxis against dry skin, wrinkle formation and/or pigment disorders.

6. The use as claimed in any of claims 1 to 3 for prophylaxis against aging processes of human hair.

7. The use as claimed in any of claims 1 to 6, wherein at least one of the compounds of the formula I is present in an effective content in cosmetic preparations.

8. The use as claimed in claim 7, wherein at least one of the compounds of the formula I is present in concentrations of from 0.01 to 30% by weight, based on the total amount of the cosmetic preparation.

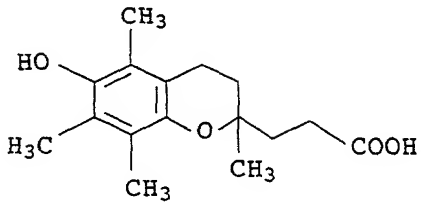
9. A cosmetic preparation for protecting the human epidermis or human hair, which comprises, in a cosmetically suitable carrier, a cosmetically effective amount of at least one of the compounds of the formula I



I

in which the substituents R^1 to R^5 have the meanings defined according to either claim 1 or 2.

10. A cosmetic preparation as claimed in claim 9, comprising a cosmetically effective amount of the compound of the formula Ia



Ia.